

REMARKS/ARGUMENTS

Claims 1-28 are pending in the application, and were rejected in the Office Action of April 4, 2007. The Advisory Action dated June 20, 2007 indicated that the claim amendments raised new issues. In view of the advisory action, therefore, a request for continued examination is filed herewith. Reconsideration of the claims in view of the previously-filed amendments and remarks, reproduced below, is respectfully requested.

New claims 29 - 33 have also been added. Consideration of these claims is also respectfully requested.

§ 103 Rejections

In the Office Action of April 4, claims 1 - 28 were rejected under 35 U.S.C. Section 103 as unpatentable over Haack, et al in view of Gilliland. In response to the office action, claims 1 and 12 have been amended to incorporate the subject matter of claim 6.

Reconsideration of the claims in view of the following remarks is respectfully requested.

The Haack Reference

Haack discloses an industrial delivery truck that includes reconfigurable modules including steering (123, 223, 323) and control modules (125, 225, 325) that can be selectively positioned at the front of the operator compartment or at the back of the operator compartment. As shown in Figs. 4, 5, and 6, these modules can be provided at opposing ends of the vehicle. Referring to column 6, line 61 - column 7, line 2, travel operation from a control handle is enabled only when a respective foot switch is depressed. Thus, as discussed at column 7 line 58 - column 8 line 17, when using the function region 325 at a first end of the vehicle, the operator is required to depress footswitch 347. When operating the function region 325' at the opposing end of the vehicle, the operator is required to depress footswitch 349.

The Gilliland Reference

Gilliland discloses a pallet truck. The pallet truck includes a single control mechanism that is controlled by the operator while riding on the vehicle or while walking alongside the vehicle. The control mechanism is rotational to provides a steering function,

and includes twist grips to provide a speed control function. Each twist grip 90 includes a paddle 100 that "permits the fingers on the hands of the operator to ... rotate the twist grip" (Col. 4, lines 8 - 11) and that "facilitates the operator in rotating the twist grip". (Col. 4, lines 36 - 38). The paddles further allow the operator to "rotate the twist grip with minimum force either while walking alongside or riding on the truck." (Abstract)

Independent Claim 1

As recited in claim 1, the present invention provides a material handling vehicle comprising an operator compartment having a fore operator control handle mounted at a first end of the operator compartment and an aft operator control handle provided at a second end of the compartment. The aft control handle is a twist grip handle, and is configured for operation by an operator facing the aft of the vehicle.

A single steering mechanism is provided on the vehicle, and is mounted to be accessible to an operator facing in both the fore and the aft directions, and a single foot switch is provided, for enabling operation in both directions and for both operator stances.

A prima facie case of obviousness requires that the cited references include all of the elements of the claims, and further, requires that an analysis supporting the obviousness rejection identify a reason why one of ordinary skill in the art would have been prompted to combine the elements. The cited references do not disclose all of the elements of claim 1. Moreover, the reason to combine the references suggested in the office action is not consistent with the references themselves.

a. The Combined References Do Not Recite All of the Elements of Claim 1

Neither the Haack nor the Gilliland reference discloses a single foot switch that enables control from both a fore and an aft control handle. Gilliland does not disclose two control handles. Haack requires the operator to use a different foot switch for each control handle.

Moreover, because the operator is required to activate a different foot switch when operating different control handles, the operator cannot "keep the left hand on handle 223 and pivot the right hand to control 225" and use "the same steering control 223 while facing

either direction", as suggested in the office action. Rather, because the operator is required to operate different foot controls, the operator must entirely change his or her stance from the transverse facing position shown in Fig. 4, to the backward facing position of Fig. 2, when using these different control handles. The operator, therefore, cannot operate the same steering mechanism while facing both fore and aft, as recited in the claims. At best, the operator can control the same steering mechanism while facing one end of the vehicle and while facing transverse to the direction of motion.

b. There is No Reason to Combine Haack and Gilliland

Claim 1, as amended, further recites a "twist grip handle mounted to a second end of the compartment and configured for operation in the aft vehicle direction". In the office action it is asserted that it would be obvious to use a twist grip handle to "provide a simple control mechanism for the vehicle".

The Gilliland reference, however, does not suggest that the twist grip "provides a simple control mechanism for the vehicle". The entire point of the Gilliland reference, rather, is to eliminate the need to rotate the twist grip and to, rather, provide an alternate method of control that does not require rotation. Rather than suggesting the simplicity of the control or the desirability of the twist grip handle, Gilliland teaches away from the use of a twist grip, suggesting that twist grips are not "a simple control mechanism" and, furthermore, that twist grips are not suitable in all vehicles or in all situations.

c. Conclusion with Respect to Claim 1

The cited references fail to disclose all of the elements of claim 1, as amended. Furthermore, the reason to combine these references is not supported by the references themselves.

In view of these distinctions, the Applicants respectfully submit that the cited references fail to provide all of the elements of claim 1, as amended, and the Applicants respectfully request that the rejection of claim 1 and associated dependent claims 2 - 5 and 7 - 11 under 35 U.S.C. § 103 be withdrawn.

Claim 12

Claim 12 is directed to an operator compartment for a material handling vehicle. The operator compartment includes first and second control handles, for access by an operator facing first and second directions, a floor switch for enabling operation from both the first and second control handle, and a single steering mechanism. The second control handle is a twist grip handle mounted for access by an operator facing a second direction, and is mounted a distance from the floor and at an angle referenced to a side of the compartment selected to be perpendicular to the arm of the operator.

The combination of Haack and Gilliland fails to disclose all of the elements of claim 12 for the reasons set forth regarding claim 1. Furthermore, neither reference discloses a twist grip handle that is mounted "a distance from the floor and at an angle referenced to a side of the compartment selected to be perpendicular to the arm of the operator." On the contrary, the only reference that discloses a twist grip handle discloses a twist grip that is provided on a control mechanism rotates, and that is not referenced to any stationary part of the vehicle.

Claim 21

Claim 21 recites a twist grip handle provided near an end of the compartment opposite the forks and configured to be substantially perpendicular to the arm of the operator while controlling the aft handle to drive the lift truck in the aft direction.

Again, neither of the cited references disclose a twist grip mounted to either end of an operator compartment, or that is mounted in any particular orientation at the side of the compartment. The reference cited, in fact, teaches the undesirability if a twist grip handle, and teaches away from using a twist grip handle. In view of this distinction, the Applicants respectfully request that the rejection of claim 21 and associated dependent claims 22 - 28 be withdrawn.

New Claims 29 - 33

New claim 29 is directed to a lift truck including a fore and an aft control handle. A controller receives the speed and direction signals from each of the fore and the aft control handles, evaluates the control signals, and determines a direction and a speed of operation of the vehicle based on the speed and direction signals received from both the fore and the aft control handles.

None of the cited references include a controller as recited in new claim 29. The dependent claims provide additional features which further differentiate from the cited references.

Conclusion

In view of the distinctions noted, the Applicants submit that the claims, as amended, distinguish over the cited references, and respectfully request that the rejection of claims 1-28 in view of the cited references be withdrawn.

The Commissioner is authorized to charge any fees under 37 CFR § 1.17 that may be due on this application to Deposit Account 17-0055. The Commissioner is also authorized to treat this amendment and any future reply in this matter requiring a petition for an extension of time as incorporating a petition for extension of time for the appropriate length of time as provided by 37 CFR § 136(a)(3).

Respectfully submitted,
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